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EXAMINER

SOUAYA, JEHANNE E

ART UNIT	PAPER NUMBER
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1634

DATE MAILED: 01/30/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,434

Applicant(s)

Tang et al

Examiner

Jehanne Souaya

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Nov 19, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 21 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 21 is/are rejected.
- 7) ☒ Claim(s) 2 and 4 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

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DETAILED ACTION

Election/Restriction

Applicant's election of Group I, claims 1-8 and 21, is acknowledged. Claims 10-20 and 23-27 have been canceled. An action on the merits of claims 1-8 and 21 follows.

Priority

1. Applicant's claim for priority to applications 09/560,875, filed 4/27/2000 and 09/496,914, filed 2/3/2000, is acknowledged. However, the currently pending claims under consideration, 1-8 and 21 have not been awarded the benefit of the earlier filing date of either application as the subject matter (SEQ ID NO: 6) in the claims is not disclosed in either the '875 or the '914 applications.

Specification

2. The disclosure is objected to because of the following informalities: The paper copy of the sequence listing recites the nucleic acid and polypeptide encoded by the nucleic acid of SEQ ID NO 1 under the same sequence identifier (the same is true for SEQ ID NOS 2-6). SEQ ID NOS: 1-6, however are directed to nucleic acid sequences whereas the specification also refers to SEQ ID NOS 1-6 as polypeptides. This objection can be overcome by separately listing the nucleic acid of SEQ ID NOS 1-6 as well as the polypeptides they encode under different sequence identifiers in the sequence listing, and amending the specification accordingly to refer to the proper sequence identifier for polynucleotides and polypeptides.

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Claim Objections

3. Claims 2 and 4 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 2 and 4 are broader than claim 1 and also fail the infringement test (see MPEP 608.01n) as they can be separately infringed from the polynucleotide of claim 1.

Claim Rejections - 35 USC § 101

Definitions: [from REVISED INTERIM UTILITY GUIDELINES TRAINING MATERIALS; repeated from <http://www.uspto.gov/web/menu/utility.pdf>]

"Credible Utility" - Where an applicant has specifically asserted that an invention has a particular utility, that assertion cannot simply be dismissed by Office personnel as being "wrong". Rather, Office personnel must determine if the assertion of utility is credible (i.e., whether the assertion of utility is believable to a person of ordinary skill in the art based on the totality of evidence and reasoning provided). An assertion is credible unless (A) the logic underlying the assertion is seriously flawed, or (B) the facts upon which the assertion is based is inconsistent with the logic underlying the assertion. Credibility as used in this context refers to the reliability of the statement based on the logic and facts that are offered by the applicant to support the assertion of utility. A credible utility is assessed from the standpoint of whether a person of ordinary skill in the art would accept that the recited or disclosed invention is currently available for such use. For example, no perpetual motion machines would be considered to be currently available. However, nucleic acids could be used as probes, chromosome markers, or forensic or diagnostic markers. Therefore, the credibility of such an assertion would not be questioned, although such a use might fail the specific and substantial tests (see below).

"Specific Utility" - A utility that is specific to the subject matter claimed. This contrasts with a general utility that would be applicable to the broad class of the invention. For example, a claim to a polynucleotide whose use is disclosed simply as a "gene probe" or "chromosome marker" would not be considered to be specific in the absence of a disclosure of a specific DNA target. Similarly, a general statement of diagnostic utility, such as diagnosing an unspecified disease, would ordinarily be insufficient absent a disclosure of what condition can be diagnosed.

"Substantial utility" - A utility that defines a "real world" use. Utilities that require or constitute carrying out further research to identify or reasonably confirm a "real world" context of use are not substantial utilities. For example, both a therapeutic method of treating a known or newly discovered disease and an assay method for identifying compounds that themselves have a "substantial utility" define a "real world" context of use. An assay that measures

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the presence of a material which has a stated correlation to a predisposition to the onset of a particular disease condition would also define a "real world" context of use in identifying potential candidates for preventive measures or further monitoring. On the other hand, the following are examples of situations that require or constitute carrying out further research to identify or reasonably confirm a "real world" context of use and, therefore, do not define "substantial utilities":

- A. Basic research such as studying the properties of the claimed product itself or the mechanisms in which the material is involved.
- B. A method of treating an unspecified disease or condition. (Note, this is in contrast to the general rule that treatments of specific diseases or conditions meet the criteria of 35 U.S.C. ' 101.)
- C. A Method of assaying for or identifying a material that itself has no "specific and/or substantial utility."
- D. A method of making a material that itself has no specific, substantial, and credible utility.
- E. A claim to an intermediate product for use in making a final product that has no specific, substantial, and credible utility.

Note that "throw away" utilities do not meet the tests for a specific or substantial utility. For example, using transgenic mice as snake food is a utility that is neither specific (all mice could function as snake food) nor substantial (using a mouse costing tens of thousands of dollars to produce as snake food is not a "real world" context of use). Similarly, use of any protein as an animal food supplement or a shampoo ingredient are "throw away" utilities that would not pass muster as specific or substantial utilities under 35 U.S.C. ' 101. This analysis should, of course, be tempered by consideration of the context and nature of the invention. For example, if a transgenic mouse was generated with the specific provision of an enhanced nutrient profile, and disclosed for use as an animal food, then the test for specific and substantial asserted utility would be considered to be met.

A "Well established utility" - a specific, substantial, and credible utility which is well known, immediately apparent, or implied by the specification's disclosure of the properties of a material, alone or taken with the knowledge of one skilled in the art. "Well established utility" does not encompass any "throw away" utility that one can dream up for an invention or a nonspecific utility that would apply to virtually every member of a general class of materials, such as proteins or DNA. If this is the case, any product or apparatus, including perpetual motion machines, would have a "well established utility" as landfill, an amusement device, a toy, or a paper weight; any carbon containing molecule would have a "well established utility" as a fuel since it can be burned; any protein would have well established utility as a protein supplement for animal food. This is not the intention of the statute. See also the MPEP at 2107 - 2107.02.

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-8 and 21 are rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a specific or substantial asserted utility or a well established utility.

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The claims are drawn to an isolated polynucleotide comprising the nucleotide sequence of SEQ ID NO 6 or the mature protein coding portion of SEQ ID NO 6, vectors and host cells comprising such, a polynucleotide that contains the complementary sequences of an isolated polynucleotide comprising the nucleotide sequence of SEQ ID NO 6 or the mature protein coding portion of SEQ ID NO 6, as well as a polynucleotide that encodes a peptide with biological activity wherein the polynucleotide has greater than about 99% sequence identity to an isolated polynucleotide comprising the nucleotide sequence of SEQ ID NO 6 or the mature protein coding portion of SEQ ID NO 6, and to a collection of polynucleotides wherein the collection comprises the sequence information of SEQ ID NO 6.

The specification asserts the following uses for the polynucleotides. At page 5, the specification teaches that the polynucleotides of the invention can be used: as hybridization probes, as oligomers, or primers for PCR, for chromosome and gene mapping, for the recombinant product of proteins, for antisense DNA or RNA, in diagnostics as expressed sequence tags for identifying expressed genes or physical mapping of the human genome. The claimed polynucleotides, however, are not supported by a specific asserted utility because the disclosed uses of the polynucleotides are non specific uses that are applicable to polynucleotides in general and not particular or specific to the polynucleotide being claimed.

Further, the claimed polynucleotides are not supported by a substantial utility because no substantial utility has been established for the claimed subject matter. For example, a polynucleotide can be used to produce a protein, however a starting material that can only be

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used to produce a final product does not have a substantial asserted utility in those instances where the final product is not supported by a specific or substantial utility. With regard to the recombinant production of proteins using the polynucleotide of SEQ ID NO 6, uses for the proteins are asserted, however they are no specific or substantial. Such uses include generation of an antibody that specifically binds the polypeptide, as a molecular weight marker, and as a food supplement. The specification further asserts that the polypeptide can be used to prevent, treat, or ameliorate a medical condition by administering the polypeptide and a pharmaceutically acceptable carrier, however the specification does not teach what this specific condition is. The specification further asserts that the polypeptide can be used in methods for the prevention and/or treatment of disorders involving aberrant protein expression or biological activity, however the specification does not teach what this specific disorder is, or whether it can be treated with the polypeptide of SEQ ID NO 6. The specification asserts that the polypeptide can be administered to individuals exhibiting symptoms or tendencies, however the specification does not teach what these specific symptoms or tendencies are. In this case, none of the proteins that are to be produced as final products resulting from processes involving the claimed polynucleotides have specific and substantial utilities. The research contemplated by applicant(s) to characterize potential polynucleotide and polypeptide products, especially their biological activities, does not constitute a specific and substantial utility. Identifying and studying the properties of a protein itself or the mechanisms in which the protein is involved does not define a "real world" context of use. Similarly, the other listed and asserted utilities as summarized above or in the instant

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specification are neither substantial nor specific due to being generic in nature and applicable to a myriad of such compounds. Note, because the claimed invention is not supported by a specific and substantial asserted utility for the reasons set forth above, credibility of the utility has not been assessed.

The specification does not teach the specific biological activity of the polypeptide encoded by SEQ ID NO: 6, and instead teaches at page 119 "homologues with identifiable functions for SEQ ID NO: [6] are shown in Table 2". In table 2, the specification recites as a description for SEQ ID NO: 6: "Gallus Gallus B locus C type lectin", however no functions for "MDMCSF" are taught or asserted in the specification. A sequence search of SEQ ID NO 6 revealed no sequences with any appreciable homology or identity to any nucleic acid sequences with any identifiable function. While the specification teaches at table 4, that putative polypeptide encoded by SEQ ID NO 6 has homology to a C type lectin domain proteins, the specification does not teach which part of SEQ ID NO 6 had this domain, what the function of a C type lectin domain would be with regard to the function or activity of SEQ ID NO 6, or how highly homologous the polypeptide encoded by the polynucleotide of SEQ ID NO 6 is to a C type lectin domain or to a protein containing such a domain. Furthermore, the specification does not assert any utilities for the polynucleotide of SEQ ID NO 6 with regard to any of the recitations in the tables.

C-type lectin proteins belong to a large family of proteins exhibiting different structures and functions, such that an analysis based solely on homology or membership in a broad family

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does not identify the ligand or biological activity or function of SEQ ID NO 4. Akimoto et al teach (Akimoto, Y, et al. Prog. Histochem. Cytochem. 1998, vol. 33, pp 1-92) that C-type lectins are a family of lectins that have a common type of carbohydrate recognition domain (CRD), however they perform diverse biological functions including clearance of molecules from blood circulation (hepatocyte asialoglycoprotein receptors), internalization of foreign and self derived materials, (alveolar macrophage lectin), role in humoral self defense mechanisms (collectins), cell-cell adhesion (selectins), and transmembrane signaling to cells (natural killer cell receptors) (p. 12, section 2.2). Figure 3 of Akimoto et al illustrates the differences in structural organization of C-type lectins, and table 3, teaches the variety of different ligands and sugars for which different C-type lectins exhibit specificity. This wide range of sugars and ligands include galactose, N-acetylgalactosamine (GalNAc), glucose, fucose, N-acetylglucosamine (GluNAc), mannose, sulfated polysaccharides, and IgE for example. Therefore, it is apparent from the teachings of Akimoto, that a C type lectin domain does not provide for common functions to proteins that contain such a domain. Therefore, further experimentation would be required of the skilled artisan to reasonably confirm a 'real world' use for the claimed polynucleotides.

However, it has been established in the courts that a utility which requires or constitutes carrying out further research to identify or reasonably confirm a "real world" context of use is not a substantial utility. As noted by *Brenner v. Manson*, 383 US 519, 535-536 (1996), "Congress intended that no patents be granted on a chemical compound whose sole "utility" consists of its potential role as an object of use - testing... a patent is not a hunting license. It is not a reward for

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the search, but compensation for its successful conclusion.” Applicants should note that because a polynucleotide of SEQ ID NO 6 lacks utility for the reasons set forth above, sequences that are complementary to such, possess a certain % identity to such, a collection of such, or vectors and host cells comprising such also lack utility.

Claim Rejections - 35 USC § 112

Enablement

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 and 21 are also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific or substantial asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

Written Description

7. Claims 2, 4, and 21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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Claims 2, and 4 as written, broadly encompass mutants and variants of a polynucleotide of SEQ ID NO 6, from any source, especially in light of the fact that no specific biological activity is recited in the claims. With regard to claim 2, the claim simply recites that the polynucleotide encode a polypeptide with biological activity, however no specific activity is recited. Such a broad recitation encompasses any general biological activity of a protein, such as the ability to obtain different conformations. With regard to claim 4, the claim simply recites "complementary sequences" of the polynucleotide of claim 1. As defined in the specification at page 7, however, 'complementary' can encompass partial complementarity between two sequences. The claim, therefore, encompasses allelic variants, mutants and homologs of SEQ ID NO 6, from any source. Claims 2 and 4 encompass a large genus of polynucleotides that have not been taught in the specification or the art. These polynucleotides could have the same or altered activity with respect to the polypeptide encoded by SEQ ID NO 6, however the specification has not taught a function or activity for the polypeptide encoded by SEQ ID NO 6, let alone any variants, mutants or homologs of such. Further, the specification has not taught or described which regions of the claimed polynucleotides are responsible for encoding the activity or any activity of a resulting polypeptide. The specification teaches that variants of polypeptides encoded by SEQ ID NO 6 are encompassed wherein the variants retain biological activity. The specification also teaches that polypeptides encoded by allelic variants may have similar, increased, or decreased activity compared to the polypeptide [encoded by] SEQ ID NO: 6. The specification, however, does not teach the specific biological activity of the polypeptide encoded

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by SEQ ID NO: 6, and instead teaches at page 119 "homologues with identifiable functions for SEQ ID NO: [6] are shown in Table 2". In table 2, the specification recites as a description for SEQ ID NO: 6: "Gallus Gallus B locus C type lectin", however no functions or activity for such are taught in the specification. A sequence search of SEQ ID NO 6 revealed no sequences with any appreciable homology or identity to any nucleic acid sequences with any identifiable function. While the specification teaches at table 4, that putative polypeptide encoded by SEQ ID NO 6 has homology to a C type lectin domain proteins, the specification does not teach which part of SEQ ID NO 6 had this domain, what the function of a C type lectin domain would be with regard to the function or activity of SEQ ID NO 6, or how highly homologous the polypeptide encoded by the polynucleotide of SEQ ID NO 6 is to a C type lectin domain to a protein containing such a domain.

Polypeptides encoded by the polynucleotides of claims 2 and 4, however, include polypeptides resulting from missense, frameshift and truncation mutations which have not been described by the specification. The recitation of the polynucleotide of SEQ ID NO 6 is not representative of the mutants, variants, and homologs, from any source, encompassed by the broad class of claimed polynucleotides, nor do the teachings in the specification make clear to the skilled artisan which nucleic acids can be changed to result in either a protein with retained or altered activity compared to the polypeptide encoded by the polynucleotide of SEQ ID NO: 6.

It is further noted that the recitation of "the sequence information of SEQ ID NO 6" in claim 21 is unclear and broadly encompasses genomic sequences corresponding to the

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polynucleotide of SEQ ID NO 6, including a full gene (which has not been disclosed), as well as to undisclosed genomic sequences, such as introns and regulatory sequences. Such sequences encompass a large genus such that the disclosed structural feature of SEQ ID NO 6 does not constitute a substantial portion of the claimed genus.

Vas-Cath Inc. v. Mahurkar, 19 USPQ2d 1111, makes clear that "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of *the invention*. The invention is, for purposes of the 'written description' inquiry, *whatever is now claimed*." (See page 1117.) The specification does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." (See Vas-Cath at page 1116.)

With the exception of a polynucleotide comprising the sequence of SEQ ID NO: 6, the skilled artisan cannot envision the detailed chemical structure of the encompassed polynucleotides, regardless of the complexity or simplicity of the method of isolation. Adequate written description requires more than a mere statement that it is part of the invention and reference to a potential method for making or isolating it. The polypeptide itself is required. See Fiers v. Revel, 25 USPQ2d 1601, 1606 (CAFC 1993), and Amgen Inc. V. Chugai Pharmaceutical Co. Ltd., 18 USPQ2d 1016. In Fiddes v. Baird, 30 USPQ2d 1481, 1483, claims directed to mammalian FGF's were found unpatentable due to lack of written description for the broad class. The specification provided only the bovine sequence.

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Finally, University of California v. Eli Lilly and Co., 43 USPQ2d 1398, 1404, 1405 held that:

To fulfill the written description requirement, a patent specification must describe an invention and do so in sufficient detail that one skilled in the art can clearly conclude that "the inventor invented the claimed invention." *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (1997); *In re Gosteli*, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989) ("[T]he description must clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed."). Thus, an applicant complies with the written description requirement "by describing the invention, with all its claimed limitations, not that which makes it obvious," and by using "such descriptive means as words, structures, figures, diagrams, formulas, etc., that set forth the claimed invention." *Lockwood*, 107 F.3d at 1572, 41 USPQ2d at 1966.

Indefinite

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 2, 4 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 is indefinite in the recitation of "greater than about" as it is unclear if the claimed nucleic acid has greater than 99% identity to the polynucleotide of claim 1 or "about" 99% identity with the polynucleotide of claim 1.

Claim 4 is indefinite in the recitation of "the complementary sequences" as it is unclear if the claim encompasses the [complete] complement of the polynucleotide of claim 1, or to sequences with only a certain degree of complementarity to the polynucleotide of claim 1. If the

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latter is the case, it is noted that the claim is improperly dependent from claim 1 as the claimed recitation in claim 4 does not further limit, but in fact broadens, claim 1.

Claim 21 is indefinite in the recitation of "the sequence information of SEQ ID NO 6" as it is unclear if the claim encompasses SEQ ID NO 6 attached to a solid support, an array of polynucleotides containing fragments of SEQ ID NO 6, or to degenerate polynucleotides which could be used to sequence SEQ ID NO 6.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Prockop et al., (WO 94/11532, 5/26/1994).

Claim 4 is drawn to a polynucleotide that comprises the complementary sequences of claim 1. The claim does not make clear if the polynucleotide encompasses a sequence that is the complete complement of SEQ ID NO 6, or to a sequence that is partially complementary or complementary only to a portion of SEQ ID NO 6. Prockop teaches a sequence (SEQ ID NO: 94 of Prockop - 18 nucleotides long) which is complementary, from nucleotides 2-11, to SEQ ID

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NO 6 at positions 1-10 of SEQ ID NO 6. Therefore, the sequence of Prockop anticipates the claimed polynucleotide as Prockop teaches a sequence which is partially complementary to a portion of SEQ ID NO 6.

12. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Boehringer Mannheim (catalog 1997, p. 95).

Claim 21 is drawn to a collection of polynucleotides wherein the collection comprises the sequence information of SEQ ID NO: 6. Boehringer Mannheim teaches a mix of hexamer nucleic acids which contain every possible sequence. Therefore, the mix of random hexamer nucleic acids of Boehringer Mannheim contains the sequence information of SEQ ID NO 6 and anticipates the claimed invention.

Conclusion

13. No claims are allowable.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Jehanne Souaya whose telephone number is (703)308-6565. The examiner can normally be reached Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (703) 308-1152. The fax phone number for this Group is (703) 305-3014.

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Any inquiry of a general nature should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Jehanne Souaya

Jehanne Souaya

Patent examiner

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1/24/03